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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ROSSI, JESSICA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. <u>BN</u> 10/828,504	Applicant(s) SCHEIRS ET AL.	
	Examiner Jessica L. Rossi	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
 4a) Of the above claim(s) 1-35 and 40-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 36-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/4/04</u> . | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-35 and 40-48, drawn to a laminated glass and a polyvinylchloride film, classified in class 428, subclass 426.
 - II. Claims 36-39, drawn to a method of preparing a laminated glass, classified in class 156, subclass 106.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the laminated glass can be made by a process where the PVC interlayer is annealed after bonding it to the glass sheets (see dependent claims 2, 20, 37, 45).
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Mr. Studebaker on 3/2/05 a provisional election was made with traverse to prosecute the invention of Group II, claims 36-39. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-18 and 40-48 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

6. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Australia on 10/22/02. It is noted, however, that applicant has not filed a certified copy of the 2002-952196 application as required by 35 U.S.C. 119(b).

Oath/Declaration

7. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. Claims 36 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Baudin (US 4842664).

With respect to claim 36, Baudin teaches a method of making a laminated glass comprising a PVC interlayer 6 (Figure 4; column 6, lines 18-27, with close attention to lines 25-27) located between two glass sheets 4, 18 wherein the PVC interlayer is bonded to the glass sheets using a polyurethane adhesive layer 16/17 located between the interlayer and each glass sheet (Figure 4; column 11, lines 34-47; column 12, lines 3-6 and 38-42).

Regarding claim 39, the reference teaches both adhesive layers 16, 17 being polyurethane (column 12, lines 3-6 and 38-42).

10. Claims 36 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Jang et al. (EP 1112840).

With respect to claim 36, Jang teaches a method of making a laminated glass comprising a PVC interlayer 16 located between two glass sheets 12, 14 wherein the PVC interlayer is bonded to the glass sheets using polyurethane adhesive layers 18 located between the interlayer and each glass sheet (Figure 1; section [0016-0018]).

Regarding claim 39, the reference teaches both adhesive layers 18 being polyurethane (section [0018]).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 36 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baudin in view of Jang et al.

With respect to claim 36, it is noted that the examiner interpreted the Baudin reference to be using polyurethane adhesive to bond each side of a PVC interlayer to the glass sheets (it is noted that the reference mainly focuses on the use of a polycarbonate interlayer throughout the reference and in the examples but states that other materials, such as PVC, can be used for the interlayer as an alternative to polycarbonate – column 6, lines 18-27; column 12, lines 3-6 and 38-42).

If for some reason it is not taken that the reference explicitly or implicitly teaches the polyurethane adhesive layers also being used when a PVC interlayer is used as an alternative to the polycarbonate interlayer, it would have been obvious to also use the polyurethane adhesive layers of Baudin when using a PVC interlayer because such is known in the art, as taught by Jang (see paragraph 10 above), where such an adhesive results in a good bond between the glass and PVC.

Regarding claim 38, selection of polyurethane having certain characteristics would have been within purview of the skilled artisan. However, it would have been obvious to use polyurethane having a glass transition temperature ranging from 50-120°C since Baudin teaches heating the laminate within this range to bond the interlayer to the glass sheets (column 11, lines 26-50).

Regarding claim 39, see paragraph 9 above.

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13. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baudin, or Baudin and Jang, as applied to claim 36 above, and further in view of Isaksen et al. (US 2984593).

Regarding claim 37, Baudin is silent as to annealing the PVC before bonding. It is generally known in the PVC material art to anneal the PVC before its use in a heating process because the annealed state allows the PVC to resist shrinkage when subjected to temperatures on the order of 100°C, as taught by Isaksen (column 1, lines 15-20 and 42-46; column 4, lines 50-55; claim 1).

Since Baudin teaches heating the laminate to temperatures exceeding 100°C (column 9, lines 30-32) it would have been obvious to the skilled artisan at the time of the invention to anneal the PVC interlayer before bonding it to the glass sheets because this would prevent shrinking of the PVC during the heating step, as taught by Isaksen, wherein shrinking of the PVC during bonding would be detrimental to the integrity of the laminate.

14. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jang et al. as applied to claim 36 above.

Regarding claim 37, it would have been obvious to the skilled artisan to anneal the PVC interlayer of Jang because this improves the strength of the PVC. It would have been obvious to anneal the PVC before bonding it to the glass sheets because annealing requires heating the PVC above room temperature and Jang teaches bonding the PVC to the glass sheets at room temperature (section [0046]).

Regarding claim 38, selection of polyurethane having certain characteristics would have been within purview of the skilled artisan.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine R. Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jessica L. Rossi
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